

## WHAT IS CLAIMED IS:

1. An electric charging apparatus attachable/removable to/from an electronic apparatus main body, which charges a secondary battery to supply electric power to the electronic apparatus, comprising:

a communication unit configured to perform communication with the electronic apparatus;

determination means for determining an electric charging condition for electrically charging the secondary battery; and

control means for controlling electric charging of the secondary battery in correspondence with an electric charging control signal for the secondary battery, received from the electronic apparatus via said communication unit, and the electric charging condition determined by said determination means.

2. The charging apparatus according to claim 1, further comprising:

an input terminal configured to input an electric power from a commercial power source; and

power source relay means for supplying the electric power supplied via said input terminal to the electronic apparatus, and relay-outputting the electric power for the electric charging of the secondary battery.

3. An electric charging apparatus attachable/removable to/from an electronic apparatus main body, which charges a secondary battery to supply an electric power to the electronic apparatus, comprising:

5           supply means for supplying the electric power from the secondary battery to the electronic apparatus;

          reception means for receiving a signal from the electronic apparatus; and

          control means for, when it is instructed by the  
10 signal received by said reception means to shut off a power source, stopping electric power supply from the secondary battery by said supply means.

4. The charging apparatus according to claim 3,  
15 further comprising electric charging control means for, when it is instructed by the signal received by said reception means to shut off the power source, if a condition for electric charging the secondary battery is satisfied, starting electric charging of the  
20 secondary battery.

5. An electronic apparatus, which an electric charging unit including a secondary battery is attachable/removable to/from, and which can be operated  
25 with electric power supply from the secondary battery included in the electric charging unit, comprising:

a communication unit configured to perform communication with the electric charging unit; and transmission control means for transmitting an electric charging control signal for the secondary battery to the electric charging unit via said communication unit.

6. The electronic apparatus according to claim 5, further comprising:

10 an input terminal configured to input an electric power from a commercial power source;

determination means for determining whether or not electric charging of the secondary battery is necessary; and

15 control means for, in a status where the electric power is supplied via said input terminal, if said determination means determines that the electric charging of the secondary battery is necessary, controlling said transmission control means to transmit  
20 a signal indicating that the electric charging of the secondary battery is enabled.

7. The electronic apparatus according to claim 5, further comprising power-source shut-off signal

25 transmission control means for transmitting a signal indicating power-source shut-off to the electric charging unit via said communication unit.

8. The electronic apparatus according to claim 5,  
wherein said electronic apparatus is an image forming  
apparatus, and wherein when an image forming  
5 instruction command is inputted from an external device  
while the electric charging unit electrically charges  
the secondary battery, said control means controls said  
transmission control means to transmit a signal  
indicating that the electric charging of the secondary  
10 battery is disabled.

9. The electronic apparatus according to claim 8,  
wherein said image forming apparatus prints an image on  
a printing medium by driving a print head.

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10. The electronic apparatus according to claim 9,  
wherein said image forming apparatus is an ink jet  
printing apparatus which forms an image on the printing  
medium by discharging ink from the print head.

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11. An electric charging control method in an electric  
charging apparatus attachable/removable to/from an  
electronic apparatus main body, which electrically  
charges a secondary battery to supply an electric power  
25 to the electronic apparatus, said method comprising:

a supply step of supplying the electric power  
from the secondary battery to the electronic apparatus;

a determination step of determining an electric charging condition for electrically charging the secondary battery;

5 a reception step of receiving an electric charging control signal for the secondary battery from the electronic apparatus; and

a control step of controlling electrically charging of the secondary battery in correspondence with the charging control signal received in said  
10 reception step and the charging condition determined in said determination step.

12. A control method for an electric charging apparatus attachable/removable to/from an electronic  
15 apparatus main body, which electrically charges a secondary battery to supply an electric power to the electronic apparatus, said method comprising:

a supply step of supplying the electric power from the secondary battery to the electronic apparatus;

20 a reception step of receiving a signal from the electronic apparatus; and

a control step of, when it is instructed by the signal received in said reception step to shut off a power source, stopping electric power supply from the  
25 secondary battery.

13. An electric charging control method for an electronic apparatus, which an electric charging unit including a secondary battery is attachable/removable to/from, and which can be operated with electric power supply from the secondary battery included in the electric charging unit, said method comprising:

a transmission step of transmitting an electric charging control signal for the secondary battery to the electric charging unit.

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14. The charging control method according to claim 13, further comprising:

a determination step of determining whether or not electric charging of the secondary battery is

15 necessary; and

a control step of, in a status where an electric power is supplied via an input terminal to input the electric power from a commercial power source, if it is determined in said determination step that the electric

charging of the secondary battery is necessary, transmitting a signal indicating that the electric charging of the secondary battery is enabled in said transmission step.

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